

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## REGION IV

345 COURTLAND STREET, N.E ATLANTA, GEORGIA 30365

March 19, 1992

Mr. Nelson Wong Carrier Corporation 855 Anaheim-Puente Road P.O. Box 1234 City of Industry, California 91749

RE: Carrier A.C. (Collierville) Superfund Site
Draft Feasibility Study (FS) Response to Comments

Dear Mr. Wong:

EPA has reviewed the draft FS Response to Comments (February 24, 1992). Although most of the major issues have been adequately addressed, the following comments should be addressed before final approval is given. The comments reflect both EPA and the State of Tennessee Department of Environment and Conservation's review.

After incorporating the following comments, please submit the revised pages or the entire revised FS by March 31, 1992. It is imperative to meet this deadline.

Page 2, Paragraph 3: This comment is to confirm previous phone conversations and faxes regarding the number and location of extraction wells. The last sentence should state: "For purposes of costing and comparison with other remedial alternatives, a range of approaches which, given available data, look to be effective in capturing the plume and preventing further contamination of the Memphis Sands at the clay pinch out area."

Page 3, Paragraph 4: Again, this comment is to confirm previous phone conversations and faxes regarding the number and location of extraction wells. The last sentence should state: "Groundwater containment alternatives will include installation of extraction well(s) to protect the Memphis Sands from further contamination at the clay pinch out and the extraction wells capture the entire plume. The number and locations of extraction well(s) will be decided in remedial design."

Page 4, Bullet 2: The response discussed the reliability/continuity of operation of the City wells. In order to ensure that there is no loss of plume during potential reduction in City water usage, a minimum pumpage rate should be specified and maintained at all times regardless of City demand. It is also recommended that in remedial design, a redundancy of extraction wells be installed so that, if a well is down due to routine maintenance or problems, the Memphis Sands is protected at all



times.

The response also stated that no periods of downtime would have resulted in significant loss of containment of the TCE plume. Please define "significant."

Page 5, GAC Treament: Although EPA disagrees that air stripping is less costly to implement than carbon adsorption, EPA agrees that air stripping is equally effective. EPA will allow this option to be dropped from further consideration.

Page 7, Response to Comment 9: Tables 8-11 and 12 should also be reproduced in the revised FS.

Page 8, Response to Comment 12: The purpose of this comment is to confirm previous phone conversations. EPA agrees that lead and zinc will not drive remediation, but the need for compliance with ARARs during Remedial Action may require treatment, and will require monitoring of these constituents.

Page 13, Response to Comment 37: In light of the recalculated risks based on worst-case values for wells in the Memphis Sands, alteratives focusing on metals should be considered.

Page 25, Response to Comment 106: The comparative analysis should include a narrative discussion describing the strengths and weaknesses of the alternatives relative to one another with respect to each criterion, and how reasonable variations of key uncertainties could change the expectations of their relative performance. There is uncertainty for alternatives 1,3, and 5 in meeting the remedial action objective of capturing the entire plume and it does not prevent further contamination of the Memphis Sands at the clay pinch out. These alternatives include continued operation of the Water Plant No. 2, but do not provide for additional extraction wells that would capture contamination that may migrate beyond the city well to the northwest and contamination that migrates from the shallow aquifer into the Memphis Sands in the area of the clay pinch out.

Prevention of offsite contamination is only a part of the remedial action objective. The Memphis Sands should be protected from additional contamination in the area of the pinch out. If we followed the premise that contamination is allowable in the aquifer as long as it remains on private property, then the aquifer is no longer protected.

If you have any questions, please contact Harold Taylor at (404) 347-7791 during my absence 3/20 - 3/26/92.

Sincerely,

Beth Brown

Remedial Project Manager

cc: Harold Taylor, EPA

Phil Coop, EnSafe

Jordan English, TDHE - MFO